



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,819	07/30/2003	Takeshi Watanabe	R2184.0245/P245	7294

24998 7590 09/22/2006

DICKSTEIN SHAPIRO LLP  
1825 EYE STREET NW  
Washington, DC 20006-5403

EXAMINER
----------

GUPTA, PARUL H

ART UNIT	PAPER NUMBER
----------	--------------

2627

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/629,819		WATANABE, TAKESHI	
	<b>Examiner</b>		<b>Art Unit</b>	
	Parul Gupta		2627	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

### DETAILED ACTION

1. Claims 1-27 are pending for examination as interpreted by the examiner. The IDS filed on 7/30/03 was considered. The arguments filed on 9/7/06 were also considered with the following results.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gehr, US Patent 6,453,395 in view of Tatano, JP401173487A in view of Iida et al., US Patent Publication 2002/0027848.

Regarding claim 1, Gehr teaches a method of creating a backup disc of a source optical disc having a read-only storage area and a writable storage area (figure 4), the method comprising: a qualification determination step of determining whether or not a target optical disc is qualified as the backup disc of the hybrid type source optical disc by comparing the source optical disc to the target optical disc based on information recorded in the source optical disc and the target optical disc (part of element 404 of figure 4); a loading step of loading, when it is determined that the target optical disc is qualified as the backup disc, backup information from the source optical disc (column 1, 56-67); and a writing step of writing the backup information in the target optical disc (completion of the copy process as explained in column 1, lines 64-67). Gehr does not

but Tatano teaches the details of the qualification step in the constitution. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the concept of the given details as taught by Tatano into the system of Gehr in order to prevent the error of the backup copying. Neither of the other references teaches, but lida et al. teaches using a hybrid optical disk. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the given details as taught by lida et al. into the system of Gehr modified by Tatano to make the system more versatile.

Regarding claim 10, Gehr teaches a system of creating a backup disc of a source optical disc having a read-only storage area and a writable storage area (figure 4), comprising: a qualification determination part determining whether or not a target optical disc is qualified as the backup disc of the hybrid type source optical disc by comparing the source optical disc to the target optical disc based on information recorded in the source optical disc and the target optical disc (part of element 404 of figure 4); a loading part loading, when it is determined that the target optical disc is qualified as the backup disc, backup information from the source optical disc (figure 4); and a writing part writing the backup information in the target optical disc (shown as elements 726 and 734 in figure 7C). Gehr does not but Tatano teaches the details of the qualification step in the constitution. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the concept of the given details as taught by Tatano into the system of Gehr in order to prevent the error of the backup copying. Neither of the other references teaches, but lida et al. teaches using a hybrid optical

disk. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the given details as taught by lida et al. into the system of Gehr modified by Tatano to make the system more versatile.

Regarding claim 19, Tatano teaches a computer-readable recording medium for storing a program (inherent to method of claim 1) to cause a computer to execute a procedure of creating a backup disc of a source optical disc having a read-only storage area and a writable storage area (figure 4), the procedure comprising: a qualification determination step of determining whether or not a target optical disc is qualified as the backup disc of the hybrid type source optical disc by comparing the source optical disc to the target optical disc based on information recorded in the source optical disc and the target optical disc (part of element 404 of figure 4); a loading step of loading, when it is determined that the target optical disc is qualified as the backup disc, backup information from the source optical disc (figure 4); and a writing step of writing the backup information in the target optical disc (shown as elements 726 and 734 in figure 7C). Gehr does not but Tatano teaches the details of the qualification step in the constitution. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the concept of the given details as taught by Tatano into the system of Gehr in order to prevent the error of the backup copying. Neither of the other references teaches, but lida et al. teaches using a hybrid optical disc. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the given details as taught by lida et al. into the system of Gehr modified by Tatano to make the system more versatile.

Regarding claim 2, lida et al. teaches the method as claimed in claim 1, further comprising: a disc determination step of determining whether or not the target optical disc is a hybrid type disc (paragraph 0386), and wherein the qualification determination step occurs when the disc determination step determines that the target optical disc is a hybrid type disc (paragraph 0386).

Regarding claim 11, lida et al. teaches the system as claimed in claim 10, further comprising: a disc determination part determining whether or not the target optical disc is a hybrid type disc (step F103), and wherein the qualification determination part determines whether or not the target optical disc is qualified as the backup disc when the disc determination part determines that the target optical disc is a hybrid type disc (figure 43).

Regarding claim 20, lida et al. teaches the computer-readable recording medium (inherent to system controller of element 10 of figure 42 in order to perform method of claim 2) as claimed in claim 19, the procedure further comprising: a disc determination step of determining whether or not the target optical disc is a hybrid type disc, and wherein the qualification determination step occurs when the disc determination step determines that the target optical disc is a hybrid type disc.

Regarding claim 3, lida et al. teaches the method as claimed in claim 1, further comprising: a disc determination step of determining whether or not the target optical disc has predetermined compatibility with the hybrid type source optical disc (paragraph

0386), and wherein the qualification determination step occurs when the disc determination step determines that the target optical disc has predetermined compatibility with the hybrid type source optical disc (paragraph 0386).

Regarding claim 12, Iida et al. teaches the system as claimed in claim 10, further comprising: a disc determination part determining whether or not the target optical disc has predetermined compatibility with the hybrid type source optical disc (step F103), and wherein the qualification determination part determines whether or not the target optical disc is qualified as the backup disc when the disc determination part determines that the target optical disc has predetermined compatibility with the hybrid type source optical disc (figure 43).

Regarding claim 21, Iida et al. teaches the computer-readable recording medium (inherent to system controller of element 10 of figure 42 in order to perform method of claim 3) as claimed in claim 19, the procedure further comprising: a disc determination step of determining whether or not the target optical disc has predetermined compatibility with the hybrid type source optical disc, and wherein the qualification determination step occurs when the disc determination step determines that the target optical disc has predetermined-compatibility with the hybrid type source optical disc.

Iida teaches in the above given sections a method of checking to see if the disk is hybrid, but not compatible with a hybrid disk. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the concept of checking for compatibility with a hybrid disk in addition to checking if the target is a hybrid disk. This would make the system more adaptable to different kinds of media.



Regarding claim 4, lida et al. teaches the method as claimed in claim 1, wherein the qualification determination step comprises: a substrate qualification determination step of determining whether or not the source optical disc and the target optical disc have the same substrate information (paragraph 0384); and a ROM qualification determination step of determining whether or not at least a portion of ROM information of the source optical disc in a read-only storage area thereof and at least a portion of ROM information of the target optical disc in a read-only storage area thereof are the same (same step in paragraph 0384 checks the validity of the ROM information), and the qualification determination step determines that the target optical disc is qualified as the backup disc when the substrate qualification determination step determines that the source optical disc and the target optical disc have the same substrate information and the ROM qualification determination step determines that the portion of ROM information of the source optical disc and the portion of ROM information of the target optical disc are the same.

Regarding claim 13, lida et al. teaches the system as claimed in claim 10, wherein the qualification determination part comprises: a substrate qualification determination part determining whether or not the source optical disc and the target optical disc have the same substrate information (part of step F101 of figure 43); and a ROM qualification determination part determining whether or not at least a portion of ROM information of the source optical disc in a read-only storage area thereof and at least a portion of ROM information of the target optical disc in a read-only storage area



thereof are the same (step F101 of figure 43 checks the validity of the ROM information), and the qualification determination part determines that the target optical disc is qualified as the backup disc when the substrate qualification determination part determines that the source optical disc and the target optical disc have the same substrate information and the ROM qualification determination part determines that the portion of ROM information of the source optical disc and the portion of ROM information of the target optical disc are the same (only proceeds if step is passed).

Regarding claim 22, Iida et al. teaches the computer-readable recording medium (inherent to system controller of element 10 of figure 42 in order to perform method of claim 4) as claimed in claim 19, wherein the qualification determination step comprises: a substrate qualification determination step of determining whether or not the source optical disc and the target optical disc have the same substrate information; and a ROM qualification determination step of determining whether or not at least a portion of ROM information of the source optical disc in a read-only storage area thereof and at least a portion of ROM information of the target optical disc in a read-only storage area thereof are the same, and the qualification determination step determines that the target optical disc is qualified as the backup disc when the substrate qualification determination step determines that the source optical disc and the target optical disc have the same substrate information and the ROM qualification determination step determines that the portion of ROM information of the source optical disc and the portion of ROM information of the target optical disc are the same.

Regarding claim 5, lida et al. teaches the method as claimed in claim 4, wherein the substrate information comprises at least one of lead-in start time, lead-out start time and a write strategy parameter (part of the TOC as recited in paragraph 0384).

Regarding claim 14, lida et al. teaches the system as claimed in claim 13, wherein the substrate information comprises at least one of lead-in start time, lead-out start time and a write strategy parameter (part of the TOC as recited in paragraph 0384).

Regarding claim 23, lida et al. teaches the computer-readable recording medium (inherent to system controller of element 10 of figure 42 in order to perform method of claim 5) as claimed in claim 22, wherein the substrate information comprises at least one of lead-in start time, lead-out start time and a write strategy parameter.

Regarding claim 7, lida et al. teaches the method as claimed in claim 1, wherein the backup information comprises RAM information recorded in a writable storage area of the source optical disc, and the writing step writes said RAM information in a writable storage area of the target optical disc (paragraphs 0394 and 0395).

Regarding claim 16, lida et al. teaches the system as claimed in claim 10, wherein the backup information comprises RAM information recorded in a writable storage area of the source optical disc, and the writing part writes said RAM information in a writable storage area of the target optical disc (shown in figures 45 and 46).

Regarding claim 25, lida et al. teaches the computer-readable recording medium (inherent to system controller of element 10 of figure 42 in order to perform method of

claim 7) as claimed in claim 19, wherein the backup information comprises RAM information recorded in a writable storage area of the source optical disc, and the writing step writes said RAM information in a writable storage area of the target optical disc.

Regarding claim 8, lida et al. teaches the method as claimed in claim 6, wherein the backup information comprises RAM information recorded in a writable storage area of the source optical disc and the ROM information of the source optical disc, and the writing step writes said RAM information (paragraph 0440) and said ROM information (paragraph 0439) in a writable storage area of the target optical disc when the qualification determination step determines that the target optical disc is qualified as the backup disc based on determination of the dummy data determination step.

Regarding claim 17, lida et al. teaches the system as claimed in claim 15, wherein the backup information comprises RAM information recorded in a writable storage area of the source optical disc and the ROM information of the source optical disc, and the writing part writes said RAM (step F401) information and said ROM information (step F404) in a writable storage area of the target optical disc when the qualification determination part determines that the target optical disc is qualified as the backup disc based on determination of the dummy data determination part (figure 46).

Regarding claim 26, lida et al. teaches the computer-readable recording medium (inherent to system controller of element 10 of figure 42 in order to perform method of claim 8) as claimed in claim 24, wherein the backup information comprises RAM

information recorded in a writable storage area of the source optical disc and the ROM information of the source optical disc, and the writing step writes said RAM information and said ROM information in a writable storage area of the target optical disc when the qualification determination step determines that the target optical disc is qualified as the backup disc based on determination of the dummy data determination step.

Regarding claim 9, lida et al. teaches the method as claimed in claim 1, wherein the hybrid type disc comprises a CD descent disc or a DVD descent disc (paragraph 0014 describes how various types of CD-format discs include "hybrid disks").

Regarding claim 18, lida et al. teaches the system as claimed in claim 10, wherein the hybrid type disc comprises a CD descent disc or a DVD descent disc (paragraph 0014 describes how various types of CD-format discs include "hybrid disks").

Regarding claim 27, lida et al. teaches the computer-readable recording medium (inherent to system controller of element 10 of figure 42 in order to perform method of claim 9) as claimed in claim 19, wherein the hybrid type disc comprises a CD descent disc or a DVD descent disc (paragraph 0014 describes how various types of CD-format discs include "hybrid disks").

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the concept of the given method of checking the compatibility of backup hybrid disks as taught by lida et al. into the system of Tatano in view of Gehr. This would serve the purpose of easily and precisely determining the physical

Art Unit: 2627

characteristics of discs without impairing the compatibility with known CD-format discs (paragraph 0017 of Iida et al.).

3. Claims 6, 15, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tatano in view of Gehr in view of Iida et al., further in view of Fairman et al., US Patent 6,898,172.

Tatano in view of Gehr in view of Iida et al. teaches the limitations of the ROM qualification elements as claimed in claims 4, 13, and 22 but does not specify what to do if the data is dummy data.

Regarding claim 6, Fairman et al. teaches the method as claimed in claim 4, wherein the qualification determination step comprises: a dummy data determination step of determining whether or not the ROM information of the target optical disc is dummy data when the substrate qualification determination step determines that the source optical disc and the target optical disc have the same substrate information and the ROM qualification determination step determines that the portion of ROM information of the source optical disc and the portion of ROM information of the target optical disc are not the same, said qualification determination step determining, when the dummy data determination step determines that the ROM information of the target optical disc is dummy data, that the target optical disc is qualified as the backup disc (column 8, lines 15-43).

Regarding claim 15, Fairman et al. teaches the system as claimed in claim 13, wherein the qualification determination part comprises: a dummy data determination

part (element 163 of figure 5) determining whether or not the ROM information of the target optical disc is dummy data when the substrate qualification determination part determines that the source optical disc and the target optical disc have the same substrate information and the ROM qualification determination part determines that the portion of ROM information of the source optical disc and the portion of ROM information of the target optical disc are not the same, said qualification determination part determining, when the dummy data determination part determines that the ROM information of the target optical disc is dummy data, that the target optical disc is qualified as the backup disc (rewritten in element 172).

Regarding claim 24, Fairman et al. teaches the computer-readable recording medium (inherent to system controller in order to perform method of claim 6) as claimed in claim 22, wherein the qualification determination step comprises: a dummy data determination step of determining whether or not the ROM information of the target optical disc is dummy data when the substrate qualification determination step determines that the source optical disc and the target optical disc have the same substrate information and the ROM qualification determination step determines that the portion of ROM information of the source optical disc and the portion of ROM information of the target optical disc are not the same, said qualification determination step determining, when the dummy data determination step determines that the ROM information of the target optical disc is dummy data, that the target optical disc is qualified as the backup disc.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the concept of overwriting dummy data as taught by Fairman et al. into the system of Tatano in view of Gehr in view of Iida et al. This will control the EFM generator to write only the nominal-depth frequency-modulated-wobbled groove (column 8, lines 15-43 of Fairman et al.).

***Response to Arguments***

4. Applicant's arguments filed on 9/7/06 with respect to claims 1-27 have been fully considered but they are not persuasive.

Applicant contends that it would not have been obvious to combine the teachings of Gehr, Tatano, and Iida because there is nothing to suggest that it would be desirable to have a system for preventing a master recording medium from being set as the copy destination recording medium, nor is there a reason to combine a system for creating copy buttons on a disc drive with a system for preventing the error of backup copying with a system for determining the physical characteristic of recording media. The examiner disagrees because it would be obvious to combine the inventions of Tatano and Gehr to prevent the error of backup copying, which is the main purpose of the invention of Tatano and the main purpose of the qualification step of Gehr. It would be obvious to modify the system to use another type of disc (hybrid disc) as taught by Iida to apply to new markets. Iida teaches determining the physical characteristics of the recording media in order to make the invention more versatile and allow any type of recording media, including a hybrid disc, to be used in the invention.



Applicant also contends that there are no teachings or suggestions in Tatano, Gehr, or Iida that it would be desirable to have a system to minimize the amount of data that must be written in a secondary writing operation to an optical disc with respect to claims 6, 15, and 24. The examiner disagrees because it is always desirable to minimize the amount of unnecessary data that is written to the disc. This will be more efficient to write only the necessary information as specifically taught by Fairman et al. in column 2, lines 63-67.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Parul Gupta whose telephone number is 571-272-5260. The examiner can normally be reached on Monday through Thursday, from 8:30 AM to 7 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PHG  
9/14/06

  
ANDREA WELLINGTON  
SUPERVISORY PATENT EXAMINER